



DATE: July 30, 2001
TO: Rick Carr
FROM: C. Richard Keller
SUBJECT: Recommended Short-Term Action Plan For Route 28 Corridor Between US 15-29 And Prince William County

This past year, KELLERCO has provided technical support to Fauquier County for a variety of technical activities along the Route 28 corridor. This technical process was closely coordinated with VDOT's local Resident Engineer, Mr. Bob Moore, and his staff as well as with the Fauquier County Department of Community Development. Principal technical activities integrated into this assessment are described below.

- Numerous citizen/staff meetings for the following service districts to update the current comprehensive plan elements for
 - Bealeton
 - Calverton
 - Catlett
 - Midland
 - Opal
 - Remington
- Traffic projections for 2010 and 2020 at key intersections along the corridor to familiarize local citizen leaders regarding the need for future intersection and roadway improvements to improve peak hour capacity and safety.
- Development of a conceptual long-term land use and transportation plan for the Bealeton Service District. This plan enhances sub-area access by indicating the need for additional privately funded roads which will provide long-range alternatives to local access via corridor Routes 17 and 28. The draft plan was developed in close coordination with a citizen's committee and VDOT staff to insure that local issues were addressed.
- Documentation of traffic accidents along the Route 28 corridor between 1995-2000 using VDOT data to determine key roadway/intersection problems. Exhibits 1 and 1a show in tabular and graphic format the summary of the VDOT provided accident data.

Corporate Headquarters

307 South Loudoun Street, Winchester, VA 22601, 540/535-0081, FAX 540/535-0109

Over this designated five-year period, 55.2% of the Route 28 corridor accidents between US 15-29 and Prince William County occurred within the four service districts. The following tables present the requisite breakdown of accidents by the affected service districts and intervening areas.

Rank	Service District	Percent of Accidents
1 st	Calverton	18.1%
2 nd	Bealeton	15.5%
3 rd	Catlett	12.6%
4 th	Midland	9.0%

For the segments outside the service districts, where 44.8% of the Route 28 corridor accidents occurred, the accidents were distributed as follows.

Rank	Other Route 28 Locations	Percent of Accidents
1 st	Between Bealeton and Midland	19.0%
2 nd	Between Midland and Calverton	14.6%
3 rd	Between Catlett and Prince William County Line	8.1%
4 th	Between US 15-29 and Bealeton	2.9%
5 th	Between Calverton and Catlett (1 accident in 5 years)	0.3%

Note that the four highest ranked sections of Route 28 have been indicated in Exhibit 1a.

Besides the previous findings regarding accidents along the Route 28 corridor, VDOT reported, via the Warrenton Residency, that average daily traffic volumes by month are significantly higher in 2001 than in 1999 and 2000. This higher trend in daily traffic is shown in Exhibit 2 for Route 28 about 0.3 mile north of Route 806 in Catlett. Such increasing volumes indicate the need to direct more resources to safety and capacity needs along this corridor.

In view of the information developed through these technical activities, the following short-term action plan is recommended for the Route 28 corridor.

1. Monitor Traffic Speeds and Develop Enforcement Plan

- Request that state/local police sustain a campaign of concentrated traffic enforcement of the 45 mph speed limit on Route 28 between Route 29 and Prince William County.
- To supplement state/local police efforts request that VDOT develop a schedule for placing the one available full time “smart” trailer at strategic locations on Route 28 between Route 29 and the Prince William County line. The current trailer “flashes” motorists’ speeds but does not record vehicle speeds.

- Support a request by VDOT to obtain sufficient funds (\$3,000 to \$5,000) to install a computer on the “smart” trailer so that vehicle speeds can be recorded. Such records would allow any trends in vehicle speeds to be monitored. These findings would then indicate the need and location for more concentrated enforcement by state/local police. This equipment investment for VDOT would allow for a more practical cost effective use of state/local police for traffic enforcement.
- If VDOT cannot make the one full-time available “smart” trailer available for sufficient speed enforcement on the Route 28 corridor, support a VDOT request for purchasing a second “smart” trailer with a computer to record speeds.

2. Construct More Paved Shoulders Along Sections of Route 28

VDOT currently has a program which Mr. Moore has used to replace narrow gravel shoulders with at least a three-foot paved shoulder. An example of such an improvement is on Route 15/29 and Route 17. Such widening enhances the visibility of the pavement edge lines and provides for more stable vehicle control whenever vehicles need to divert from the paved travel lane onto a shoulder. Narrow gravel shoulders/ditches certainly can contribute to the loss of control for emergency vehicle maneuvers.

In order to benefit from this VDOT program, the County should request that VDOT consider the following roadway sections for consideration of shoulder improvement projects.

- Route 28 from Liberty High School to the Midland project for selective shoulder upgrading and culvert modification to reduce occasional roadway flooding problems.
- Route 28 between Calverton and Catlett for complete shoulder widening and paving to at least three feet.

In order to maximize the shoulder widths within available right-of-way, poles may need to be relocated and trees removed.

3. Intersection Safety Study at Route 28/Oak Shade Road

Request that VDOT’s District Traffic Engineer evaluate in detail traffic accidents for the past five years at this intersection to determine the need for improvements to enhance peak period traffic safety. Currently, this intersection has no northbound left turn lane and a hillcrest to the south, which may impede sight distance for vehicles exiting Oak Shade Road.

4. Special Traffic Study for Route 28 Corridor

With increasing traffic volumes and no currently stated funded roadway improvements along the corridor except the longer term interchange proposed by VDOT at Route 17/28 in Bealeton and the Cedar Run Bridge project on Route 28, the County should request that a special corridor traffic study be completed by VDOT or a consultant as soon as possible. A careful assessment of various fixed object accidents along the entire corridor would determine the need to relocate poles or remove trees, which may be within the existing right-of-way. Perhaps VDOT would also consider “grooved” rumble strips either on the edge of the pavement or within the double yellow center lines to deter run off roadway accidents or illegal passing on double yellow lines. This action could lead to a test section of Route 28 being selected for special treatment at the locations described below.

- The section between Oak Shade Road and Midland which is experiencing increased traffic volumes due to new development at Bealeton and activities at the Liberty High/Middle School tract; and
- Within the Calverton Service District which has a significant number of driveways and intersections

5. Monitor Traffic Accidents at Route 17/28, Meetze Road and Other Intersections Especially in Calverton

Request that VDOT continue to monitor traffic accidents at all the two important intersections to verify the need for advance warning devices and travel lane modifications or signalization to improve peak period capacity and/or safety.

6. Purchase Sufficient Short-Term Right-of-Way for Possible Later Improvements

Should the purchase of additional right-of-way be necessary for short-term Route 28 improvements, it is recommended that sufficient right-of-way width be purchased for future improvements; i.e. additional left/right turn lanes or possible widening to four lanes.

7. Secure Project Funding

Secure funding to implement the traffic safety and selected roadway widening improvements as interim measures before more significant roadway projects are funded and implemented. The following funding sources could be considered.

- A request could be made of VDOT through the Culpeper District Engineer to secure funding for Route 28 corridor improvements. Funding sources could include construction, hazard elimination or special funds. However, VDOT would probably require that any “interim” improvements be compatible with previous CTB project improvement approvals.

- Safety trailer funds could be secured from DMV or possibly VDOT's maintenance funds.
- DMV highway safety mini grants could be requested by the County. Each school site along Route 28 may be eligible for a \$1,500 grant. Contact:

Mr. Doug A. Stader, Manager
Community Transportation Safety Program
Transportation Safety Services
540-801-0374

- Special grants could be secured from DMV for increased traffic enforcement.

cc: Bob Moore, VDOT Resident Engineer
Jeff Hores, VDOT District Traffic Engineer
Sharon McCamy, Fauquier County Board of Supervisors
Ray Graham, Fauquier County Board of Supervisors
Gary Christie, Rappahannock-Rapidan Regional Commission

Please note that the referenced exhibits in this technical memorandum are available for inspection in the Fauquier County Department of Community Development, 40 Culpeper Street (3rd Floor), Warrenton, VA.